

## 67. Dynamic capacity of the adaptability of steppe sheep breeding systems in response to the challenge of climate change

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In order to better adapt to cyclical and persistent drought, sheep herders in the Algerian steppe often adopt proactive strategies involving various resources. They have also learned to combine local expertise and exogenous knowledge (scientific and technical). Our inquiry focuses on the ability of farmers to adapt their practices. The study hypothesis concerns the capacity of farmers to combine their various assets: social, human, natural, physical, productive, financial, etc. To achieve a clear understanding of the practices implemented, we opted for a systematic approach and participatory tools. We observed the practices of three breeding systems (sedentary, semi-transhumant and migratory) and surveyed 86 agro-pastoralists in the El-Guedid Djelfa region. Our main results show that the agro-pastoralists' rationale is one of continuous adaptation. All the livestock systems studied have managed to maintain themselves and reproduce using anticipatory strategies to ensure easy access to various local fodder resources (self-produced, rented and purchased). They combine their capital (resources or assets) in various ways in their decisions, which determine how they will perceive and anticipate drought situations. Human and social assets are important elements in the way in which farmers respond to events that affect their business. Studies are under way to assess the resilience of these systems in the future, hence the question that is the subject of our ongoing work: is farmers' current capacity to adapt sufficient to cope with the scale of the climate change challenge?